GL-EXP-DIMU-CN

Crestron Green Light® Universal Dimmer Expansion Module, Cresnet® Communications

- *Single-channel universal lighting dimmer*
- *Crestron® system integration via Cresnet® communications*
- *Supports dimmable LED, incandescent, electronic low-voltage, magnetic low-voltage, and 2-wire fluorescent lighting loads*
- *Rated 16 A at 100-277 VAC*
- *Auto load type detection*
- *Forward and reverse phase modes*
- *Zero-cross filter technology for reduced lamp flicker*
- *Extreme stability under noisy power line conditions*
- *Built-in air gap relay*
- *Closure-activated override mode*
- *UL® 924 listed for emergency lighting control*
- *Surface mountable NEMA Type 1 enclosure*
- *Mounts on a wall panel or above a suspended ceiling*
- *UL 2043 listed for installation in an environmental air handling space*

The GL-EXP-DIMU-CN is a single-channel universal dimmer expansion module that allows for added lighting zones without an additional cabinet install. The expansion module controls electronic and magnetic low-voltage, LED, incandescent, and 2-wire fluorescent loads. Utilizing proprietary zero-cross filter technology, the GL-EXP-DIMU-CN compensates for line voltage and frequency fluctuations to provide immunity to power line noise and a dramatic reduction in lamp flicker.

Auto-Detecting Universal Dimming

Under normal operation, the GL-EXP-DIMU-CN detects the connected load type and selects the appropriate operating mode automatically. Reverse phase (trailing edge) mode supports incandescent and electronic low-voltage load types, while forward phase (leading edge) mode handles magnetic low-voltage and other inductive load types. Center phase mode is also available, combining reverse and forward phase load control to address special cases. The operative mode is indicated by two LEDs located on the front panel.

Cresnet® Communications

The GL-EXP-DIMU-CN interfaces with a Crestron control system via Cresnet. Cresnet is a simple 4-wire network bus that provides the communications backbone for a system of Crestron lighting dimmers, switches, keypads, shades, thermostats, and other devices.

Emergency Lighting Control

The GL-EXP-DIMU-CN is UL® 924 listed for use in controlling an emergency lighting load. In the event of a power failure, a contact closure from a power loss sensor (GLS-PLS-120/277, sold separately) activates the override mode in the GL-EXP-DIMU-CN to turn on the lighting load if it is off (assuming line power is supplied by a backup power source). The override dimming level can be preset to any value when commissioning the lighting system, so even if the load is already on prior to a power failure, it will change to the preset level when override mode is activated.

Plenum Rated NEMA Enclosure

The GL-EXP-DIMU-CN is designed to be mounted to a vertical surface and is UL 2043 compliant to allow for installation in an environmental air-handling space above a suspended ceiling. Conduit knockouts are provided on the bottom and lower sides of the unit. All connections are made via screw terminals behind the front cover.

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15 Volvo Drive | Rockleigh, NJ 07647
www.crestron.com | 800.237.2041

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Specifications

Load Control

Dimmer Channels	1
Load Rating	16 A
Line Voltage	100-277 VAC, 50/60 Hz
Dimmable Load Types	Incandescent, LED, electronic low-voltage, magnetic low-voltage, 2-wire fluorescent

Communications

Cresnet	Cresnet slave mode

Connections

NEUT	(3) Captive screw terminals; Neutral connections for feed and load; 24 to 10 AWG (0.25 to 4.0 mm^2) wire size
LINE	(2) Captive screw terminals; Line power feed input and pass-through; 24 to 10 AWG (0.25 to 4.0 mm^2) wire size
DIM	(1) Captive screw terminal; Dimmed load output; 24 to 10 AWG (0.25 to 4.0 mm^2) wire size
OVERRIDE	(2) Captive screw terminals; Low-voltage contact closure sensing input; Activates override mode when a closure is sensed; 26 to 14 AWG (0.14 to 1.5 mm^2) wire size; For use with Class 2 wiring only
CRESNET	(4) Captive screw terminals; Cresnet slave port (communications only, does not use Cresnet power); 26 to 14 AWG (0.14 to 1.5 mm^2) wire size; For use with Class 2 wiring only
Ground	(1) 3-terminal grounding block

Controls and Indicators

PWR	(1) Green LED, indicates line power is applied to either LINE terminal
NET	(1) Yellow LED, indicates Cresnet network communication
ERR	(1) Red LED, indicates a variety of error conditions via blinking patterns (refer to the installation guide)
ON/OFF	(1) Pushbutton and (1) red LED, pushbutton toggles the load output on and off (press and hold to cycle the dimming level up and down), LED indicates the load output is energized
FWD	(1) Red LED, indicates forward phase mode (or center phase mode if REV indicator is also on)
REV	(1) Red LED, indicates reverse phase mode (or center phase mode if FWD indicator is also on)
RESET	(1) Pushbutton, initiates hardware reset
SW1	(1) Two-position slide switch (behind front cover), enables/disables the zero-cross detection filter (disabled by default)
SW2	(1) Two-position slide switch (behind front cover), not used
SW3, SW4	(2) Two-position slide switches (behind front cover); selects auto detect (default), forward phase, reverse phase, or center phase dimming mode

Environmental

Temperature	32° to 104° F (0° to 40° C)
Humidity	10% to 90% RH (noncondensing)

Construction

Enclosure	NEMA Type 1, galvanized steel with gray matte powder coated removable front cover panel, extruded aluminum heat sink on rear, (2) integral mounting flanges, (4) 0.5 in. (13 mm) or 0.75 in. (19 mm) conduit knockouts on bottom and lower left & right sides
Mounting	Surface mount, must be oriented upright and mounted to a vertical surface with 6 in. (153 mm) minimum spacing above and below for proper ventilation and heat dissipation

Dimensions

Height	8.78 in. (223 mm)
Width	6.39 in. (163 mm)
Depth	3.16 in. (81 mm)

Weight

3.43 lb (1.56 kg)

Compliance

C(UL)US, UL 924, UL 2043, FCC Part 15 Class A commercial use

Models

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Available Accessories

GLS-PLS-120/277
Power Loss Sensor

CRESNET-DM-NP-SP500
Cresnet® Control Cable, Data Only, Non-Plenum, 500 ft (152 m) spool

CRESNET-NP-TL-SP1000
Cresnet® Control Cable, Non-Plenum, Teal, 1000 ft (304 m) spool

CRESNET-P-TL-SP1000
Cresnet® Control Cable, Plenum-Rated, Teal, 1000 ft (304 m) spool

This product may be purchased from select authorized Crestron dealers and distributors. To find a dealer or distributor, please contact the Crestron sales representative for your area. A list of sales representatives is available online at www.crestron.com/How-To-Buy/Find-a-Representative or by calling 855-263-8754.

This product is covered under the Crestron standard limited warranty. Refer to www.crestron.com/warranty for full details.

The specific patents that cover Crestron products are listed online at patents.crestron.com.

Certain Crestron products contain open source software. For specific information, please visit www.crestron.com/opensource.

Specifications are subject to change without notice.

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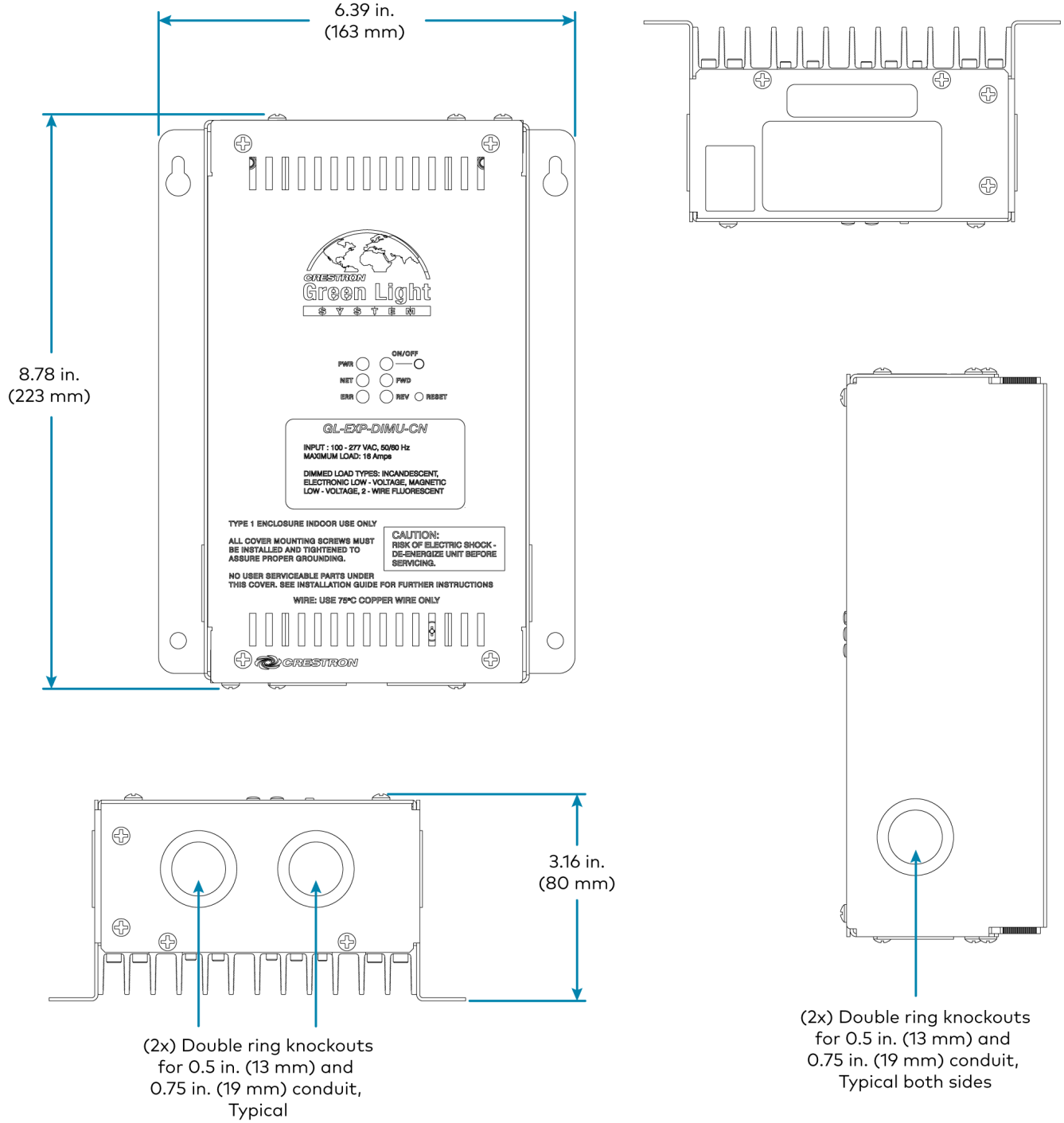

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